

MEMORANDUM FOR RECORD

SUBJECT: Corps Specifications Steering Committee Meeting Minutes

1. The Corps Specifications Steering Committee (CSSC) met on 20 and 21 June 2000 in Atlanta, Georgia.
2. Announcements. Joseph Miller, CENWD-MR-ET-E was absent due to vacation, Don Bergner, CESP-ET was absent due to involvement with a Bay Bridge problem. Johnny Baggette and Steve Gooden both represented SAD because of other commitments. Steve Freitas, CESP-ET was present to give a presentation on the SPECSINTACT amendment procedure. Carl Kersten, NAVFAC and Ray Duncan, Spec Consultants, were also present. [Enclosure 1](#) is the list of attendees.
3. Headquarters Update. Charlie Baldi presented the update on headquarters issues.
 - a. Reorganization. Under the reorganization, ten people will be in the GAO building, other personnel (Engineering and Construction) will be located at the Kingman Building at Ft. Belvoir. The reorganization becomes official on 16 July. There will be four branch chiefs instead of approximately 10 before. The chief selections have been made. The staff of 88 (plus vacancies) has been cut to 70, but 99% of the mission has been retained.
 - b. Guidance and Criteria Updates. Rick Dahnke is now in charge of the guidance and criteria updates. He is in the Technical Policy branch headed by Harry Singh. There are three teams: environmental policy, construction policy, and engineering policy. He has requested total control of funds for the criteria update program that will be handled at Huntsville Center. Rick will oversee the Notice Program, which will be consolidated at Huntsville Center.
 - c. Submittal Conversion. Phase 1 of the conversion of submittals to the new system has been completed. The databases have been uploaded and will be on the July CCB disk.
 - d. Dr. Checks. Rick Dahnke now also has responsibility for the Dr. Checks system. There is now a corporate agreement to adopt Dr. Checks as the official design review system. The

ARMS TCX people are aware of the decision.

e. Site licenses. The new site licenses for SPECSINTACT support are based on last year's E&D funds.

f. Resident Management System (RMS). There is a new guide spec in system for RMS. The specification is mandated for use on applicable projects effective 30 June 2000.

g. NASA status. NASA is making drastic cuts in their criteria program and is looking to the Corps for help. NASA, HQUSACE, and OMB are looking at the situation.

h. Miscellaneous. Rick Dahnke will not have responsibility for architectural specs. Charlie Baldi will handle most incoming Civil Works items in Engineering and Construction, including customer representative type issues, dealing with industry, etc. Airfield pavement is now under Water Resources.

4. Navy. Carl Kersten reported that the Navy is reorganizing their criteria program. He is moving to the Norfolk as a team leader for four or five architects who will be doing guide specifications and criteria. Some personnel from Port Hueneme retired; others have transferred. Carl will also be involved in the Tri-Service specifications issues.

5. Minutes of Last Meeting. The minutes of the 2 March 2000 meeting were presented. Anil Nisargand made a motion that the minutes be approved, and Larry Seals seconded.

6. Hammer Award nomination. Freddie reported that the award nomination had been submitted.

7. Partnering with Navy and NASA. Carl Kersten, NAVFAC was present at the meeting. Tom Henshaw, NASA was contacted by email, but Freddie Rush was not able to talk to him. Navy and NASA have open invitation to our meetings. Rick Dahnke reported that the last scheduled partnering meeting was postponed, and the next meeting would be 17 July 2000. Rick and Ray Navidi attended the CSI version of same meeting. Work is proceeding with a Tri-Service document type. The purpose is to insure that the criteria are the same when published. There are working groups for the process and some criteria documents are being issued. The goal of the program is to have one document type for all services, (There are currently TM, manuals, etc., depending on the agency), and to unify the specifications. Two people from each agency (Jim Quinn and Rick Dahnke for the Corps) will meet to decide how to proceed

on unifying the specification. The meeting will occur sometime in the summer of 2000. Work on merging specifications should begin in FY 2001. Freddie Rush stated that there is already some agreement on submittals. Rick Dahnke said there would probably also be work on the paint specifications since GSA is canceling the Commercial Item Descriptions upon which current guide specifications are based. Currently the only United States standards are SSPC, etc., Canadian standards, (such as MPA), will also be looked at. Rick stated that the Architectural specifications should also be easy to combine. Mechanical specifications will be more difficult because Corps of Engineers specifications are system-based and Navy specifications are component-based. It was suggested that tailoring might be the key to combining specifications while providing some uniqueness. There are also some problems with Corps of Engineers specifications such as concrete, etc.

Questions remain on who will be responsible for what work, and how the unified system will be maintained. The Navy doesn't have a notice program. Jim Quinn reported that there are currently 417 Corps specs, 57 of which are Civil Works. Navy has about 400 specifications. The Navy doesn't have a specifications committee now. There have been some teleconferences, but a committee hasn't met for about a year. Carl Kersten said he would try to get the criteria managers together, at least by teleconference.

Anil Nisargand asked if commercial specifications could be used for standard items. Rick Dahnke replied that there is a problem with commercial specifications, because they don't include Federal mandates. Freddie Rush said there is also a difference in philosophy outside the Government; Government specifications have to address competition, socio-economic policies, and SPECSINTACT compatibility. Ray Duncan agreed that there is a problem with using proprietary specifications, and that there would be a better chance with state specifications because they should also be addressing socio-economic policy and using Army/Navy type specifications. He also reported that the National Institute of Building Sciences (NIBS) was trying to develop an open competition specification for nationwide use, but hasn't been able to develop it.

Larry Seals stated that Corps of Engineers specifications are a primary source for distributing Lessons Learned. Design-Build contracting also has to incorporate Federal mandates, etc. He reported that a group is working on extracting such requirements from guide specifications and other criteria and will prepare a requirements document for Requests for Proposals. It will possibly be suitable for Design-Build

contracts. The document will possibly be by Unifomat, but CSI's Perspective is also being investigated.

The discussion turned to Design-Build issues. Ray Duncan expressed a concern about some problems with Perspective - DBIA is made up of contractors, and there may be some responsibility issues. The owner has certain obligations that can't be delegated, such as environmental, safety, etc. He recommended not rushing into Design-Build. Another problem is that owners have no comprehension of what it is actually costed in a project since their only input is from the builders. Some experience indicates that there may be no cost saving. He suggested that there are places where it is appropriate, such as areas like cell phone towers, where the industry has knowledge that the designers don't.

Jim Quinn stated that CSI/DBIA is working on a Government friendly version of the Design-Build package. Johnny Baggette said that Military Programs uses Design-Build for congressional insert work by mandate, unless special dispensation is obtained. The Navy has reported good results in some divisions with work being completed within time and cost. Carl Kerstin reported that some Navy offices are using a two-step design-build build process and are paying contractors for preparing plans and specifications. SouthDiv (Navy) is using very few drawings, relying mostly on the specifications.

There was also discussion on paying for design under a design-build contract. The Navy pays a stipend for the design, however, Corps guidance is not clear. One of advantage of Design-Build is that it permits executing the program quickly since design and construction funds are obligated the same year. There was also discussion on the actual costs of design-build contracting and how the costs are tracked throughout the entire process. The process has been used for family housing with varying results. Steve Gooden reported that Savannah District had considered using the Perspective program for a project, but has not used it yet. The Navy currently has a contract to work out some of the problems involved in using Perspective for Government contracts.

Upon returning to the original discussion of partnering with Navy and NASA, Freddie Rush said that he would do more to coordinate email with Navy and NASA. Rick Dahnke will get tri-service meeting minutes on our website.

Mike Dahlquist suggested that there may be a need to work to influence regulations, etc. to work toward maintaining a

single guide spec system. This would result in guiding, rather than reacting to situations. Freddie Rush questioned how the Resident Management System would work with design-build. He suggested that we need to keep a broad focus on the issue.

Steve Gooden recommended setting up a task group to work with Perspective to get it working like Navy is doing. He said that the barrack project that was being looked at was too complex and the time frame was too short frame to learn new software. Freddie Rush reminded the committed that we had problems getting districts to use SPECSINTACT; we have to consider the districts response to new programs. The Specifications Workshop indicated that Districts are using SPECSINTACT to some extent, and therefore are looking to the Steering Committee for support. Construction is also looking for SPECSINTACT to provide input to RMS.

Ray Duncan suggested that, due to costs and limited number of subscriptions sold, Perspective might not survive. Jim Quinn said that Perspective is not the only option; we are doing Design-Build without it. Freddie stated that we should look at alternatives.

8. Election of District members. Two nominations were submitted: Steve Freitas - Sacramento District and Doug Crum - St Paul District. Two other potential nominees had declined. Dave Barber made a motion to accept the nominees, Anil Nisargand seconded. There was no discussion. The motion passed unanimously. Since there was no vote, Doug Crum was selected to be the new secretary. Freddie Rush noted that Steve was also being funded for participation on the SPECSINTACT board. He also suggested having Steve Freitas start the SPECSINTACT users group.

9. Specifications Workshop. John Kerkowski reported the following information for the workshop:

Receipts		
54 attendees at @\$60.00 =		\$3,240.00
Expenses		
Portfolio's		\$1,535.00
Pens		277.45
Shipping/Handling		92.50
Hotel, conference room 3 days		1,227.20
Miscellaneous supplies		58.26
Balance	\$	49.50

Freddie reported that some of the letters discussed at the March CSSC meeting had been sent. He will send the remaining letters. The next conference is tentatively being planned for 2003.

10. Virtual Information Library. Freddie Rush reported that the requests for information on standards had been sent out to the districts. One was a prioritized list from CSSC asking for verification that the districts would support the program. Responses had not been analyzed yet. Rick Dahnke had budgeted funds for maintenance of publications in FY 00 and FY 01, however, current policy is that Headquarters can pay for support but not for buying publications, so the funding was removed for both years and will be put back in the FY 02 budget. A decision has not been made yet on how payment will be made for standards. There are lists of publications, but no prices. Rick said that it is difficult to negotiate without money. The letter that went out didn't give a formula for the charges or what cost savings would be.

Johnny Baggette noted that some documents aren't available in electronic form and have to be ordered in hard copy. Don Carmen reported that he had done research and sent an email to CSSC members on alternatives evaluated, cost per documents, access, etc. He included potential savings with different systems and coverages. St. Paul District's costs went from \$60,000 contract to \$10,000 budget for pay as you go. Baltimore District budgeted \$250,000, but only spent \$111,000 last year. IHS charges for each document; ILI only charges the organization once per document, so a library could be built. Steve Freitas reported that Sacramento District went from \$27,000 to \$2,100 by going pay as you go. He said that he would prefer a discount to Headquarters management.

Don Carmen noted that it looks like people want electronic format, and the impetus should be on saving money.

Rick Dahnke said that ILI would also tell who in organization has documents so it may not be necessary to get another copy.

Mike Dahlquist said that, if cost is not an issue IHS is best way to go, but cost is a factor. He said we might not need a Cadillac. A bulk discount would help with costs.

Freddie Rush noted that at the time the process was started, only IHS could provide the necessary standards electronically; apparently the situation has changed. He also noted that some standards might be on CCB. Rick Dahnke said that the WES librarian has compared the IHS and CCB lists. He also said

that the Bulk purchase for CCB will expire at end of FY 01. At that time, continued purchases will have to be centrally funded, which is unlikely, or through local purchase. NIBS will present a business case in July, which may include more reference publications. NIBS would negotiate with IHS, resulting in something that would probably be similar to a basic service with a subscription code for other publications.

This issue is currently on the table for the TriService group. Rick also noted that the Safety Office got money for a bulk purchase of NFPA, that permits five simultaneous users, but he didn't know if it was only for Headquarters, or if it was Corps-wide. If it is available Corps-wide, Rick will make the information available.

In discussing the differences between the various vendors, it was noted that with USA and ILI, the purchase is from USA or ILI, not from organization. The District then owns the copy and doesn't have to pay for additional copies. IHS provides a site license per building and charges for other copies. ILI would track purchases to prevent a District from paying for more than one copy of a standard. Freddie Rush suggested that a designer could get a document, then pass it on to Construction. Jim Quinn said that if it were legally permissible, the document could be put on the District server.

Anil Nisargand emphasized that Area Offices should have access from their computer to documents because they don't have sufficient storage space for hard copies. The NIBS system would be web-based. Don Carmen cautioned that someone would have to watch monthly/yearly fees. Rick Dahnke noted that the Corps is not currently paying for CCB; we are only paying for SPECSINTACT. Purchase of CCB would have to be controllable by the district due to different sizes and requirements.

Freddie Rush stated that we need to get something to use until the CCB system for standards is available. Rick said that he needs to know the prices for standard to have a basis for negotiating a contract. Johnny Baggette said that we need to share with the districts what other districts are doing and what is happening with central purchase. Charlie Baldi suggested that we could explain what we are doing, what other districts are doing, and what is happening on central purchase. Freddie recommended that the Division members inform their districts. It was suggested that the E&C newsletter could be used

Don Carmen said that we need to be flexible to accept some hard copy if cheaper than all electronic. The survey didn't clarify if this would meet the users needs. Freddie suggested

asking districts what would actually meet their needs. Mike Dahlquist said that the question could have different answer depending on who pays for service. The request for information would have to make clear who would pay for the standards. Rick Dahnke responded that he needs to get cost information, then figure out how to pay for the service. He said he could try to use year-end money for some standards. He would also check with the Safety Office on the possibility of using their contract for NFPA. ILI would cost \$50,000 for the index, then a charge per document downloaded. This would result in a basic cost of approximately \$1,300 per district if all participated. He asked if the CSSC would want to pursue ILI concept. He noted that both ILI and USA could meet Corps needs as well as IHS. Don Carmen said that he had not been recommending ILI, just presenting information. Steve Freitas said that most standards can currently be obtained from the standards organization or vendors with credit card on Internet. Mike Dahlquist said that this gets very difficult to administer because each purchase is a separate action. By using service an account could be set up account to charge against. Anil Nisargand agreed that individual purchase is less efficient than maintaining access throughout the district for a standard. Don Carmen emphasized that the scope should permit some hard copies access because requiring all electronic format could limit the selection to IHS. He said that the average document cost is \$40, with a range of \$25 to \$1000.

Steve Gooden said that we know what the districts are doing; Headquarters needs to look at the options to provide the list of what we need. He suggested that we need an RFP process with technical evaluation to provide what we need. Steve Freitas asked if Headquarters has the contract, would all districts have to go there? Charlie Baldi suggested that Headquarters might pay for index with the districts paying for actual documents. Freddie Rush suggested that the contract probably wouldn't prohibit districts from getting documents cheaper elsewhere. He stressed that we need to make it clear that "cheaper" documents may have additional administrative costs that would eliminate cost savings.

Johnny Baggette said that we need electronic or quick access, possibly same day, but we may have to back off from immediate access Corps-wide and let the districts address the need for some documents individually. Mike Dahlquist said that the RFP process would identify what is available. He suggested that most commonly used documents are available electronically, and that electronic availability varies by organization more than vendor. Rick Dahnke said that same day may be too

restrictive, and that 24-hour or next day delivery such as FedEx might be sufficient. The method may depend on the document size. There should also be Safeguards against making duplicate purchases by the same organization such as ILI provides. Anil Nisargand said that there could be a problem with storing hard copies. Johnny Baggette suggested that they could be scanned and stored electronically. Mike Dahlquist noted that ASTM and ANSI standards on USA are all electronic. USA includes unlimited access to the ASTM's, which can be viewed online. With ILI the documents have to be downloaded to view and must be paid for.

11. SICCB/Amendments/SMRL. The next meeting of the SICCB is scheduled for July 2000. Steve Freitas and Jim Quinn will attend, Rick Dahnke may also attend. The 32-bit version of SPECSINTACT is scheduled to be out the end of FY 2000.

a. Submittal Register. Rick asked that the Army ENG 4288 be taken out and the Navy submittal register be used. The Construction regulation will be modified. In order to use the RMS submittal register, SPECSINTACT will have to produce a submittal list for the project. The format of the submittal list must be approved by TriService. Steve Freitas suggested adding the submittal list to end of Section 01330. Rick said that a single register is still needed in the system, and it will probably be close to Navy's submittal list, which is close to the RMS requirements. A submittal register will still be required for non-RMS type projects, however only one register will be needed, not the three currently in use. Freddie Rush suggested that, if only Army uses the list, there might be some resistance to preparing it. Rick said that NASA might also want a list. It was agreed that the goal should be to work toward a common submittal register or list which would meet all needs.

b. Amendments. The 32-bit version of SPECSINTACT lets you indicate percent complete (35%, 60%, final) for a project. It permits creation of folders under Printdata for each phase. It will also have .pdf driver. A separate .pdf folder will be created for each submittal level. The entire section, or individual pages can be printed. The 32-bit version will have better page control, but may still require inserting some page breaks. Steve Freitas said that Sacramento District currently used bold italicized instead of underline for insertions and strikethrough for deletions.

c. Standard Master Reference List (SMRL). Jim Quinn reported that IHS is currently maintaining the SMRL under contract to SPECSINTACT for all three agencies.

12. Submittals. Jim Quinn reported that Phase I of the submittal conversion has been completed. This involved changing submittal paragraphs and introductory notes. The "G" has been changed to "GA" and "FIO" has been taken out. Phase II will consist of looking at submittal designations. This may require two parts to be manageable: paragraph format and designations. There are still some format changes needed and changes to SD numbers and titles. He estimated that Phase II would be completed by the end of FY 2000. ITM and LST tags haven't been changed yet.

Jim Quinn also said there is a need to look at distance learning to supplement the Prospect specifications course. He said then an effort could be made toward putting current information on the Internet, if money is available. This could then be developed further. The information that has been developed for the course is almost ready to put on the Internet; sample lessons and testing devices are needed to complete it. Freddie suggested that this should be a supplement, not replacement for the Prospect course because there is a lot of learning that takes place at courses due to presence of different districts.

Mike Dahlquist reported that he had sent an email to Freddie Rush on submittal processes. His paper was based on discussions at the last CSSC meeting and addressed number of submittals and what to do with "FIO" submittals. Mike had suggested waiting until other processes related to submittals have been completed, doing more research to see what is going on within corps, other agencies, private industry, and be ready to move when the time is right to address it. Freddie Rush reported that the current MVD policy on submittals is based on discussions with contractors and was prepared by Construction. Since the Corps doesn't have the resources required to check submittals, the intent of the policy was to limit number of submittals. There is still disagreement between Engineering and Construction. Engineering wants to have some say in "FIO" submittals. Steve Freitas stated that Sacramento District has had Construction and Engineering agree on submittals. Mike Dahlquist noted that the number of submittals in Concrete Guide Specs has been reduced due to an emphasis on system submittals instead of individual submittals. John Kerkowski noted that what do you do with the submittal, could be significant cost for AE (Title II services) jobs since AE costs during construction aren't funded. Military Construction has eliminated contingencies in funding so the Submittal Register could have significant cost on project. AE's have an interest in putting "GA" on

submittals if they are doing Title II. Freddie Rush said that some districts are requiring "GA" on AE projects as quality control on AE design; however, this is an expensive way of doing it quality control. Rick Dahnke noted that the designers could change the guide specification designations. Freddie Rush asked if there is a need to educate Engineering with Construction feedback on the costs of submittals and the value added? Designers need to think through decision on costs associated with submittals, since without a contingency; submittal review costs come out of construction Supervision and Administration. Mike Dahlquist said that there is also a perceived question on liability, i.e. can a contractor proceed when "FIO" submittal is submitted, or must he wait for response. Rick Dahnke noted that limiting the number of submittals is addressed in the Specifications regulation. Tats Hirata noted that the MVD policy permits slight variation in "FIO", and that some of his people think any variations should be "GA". Freddie Rush stated that the FAR requires noting any variations on submittals.

13. CEGS error reporting. Omaha District had submitted a paper on SPECSINTACT error reports. Jim Quinn has checked latest update and reported that the errors consist of brackets, section references, and unresolved references. His summary of the errors was:

Of the 417 guide specifications:

25 have bracket process errors (21 CW, 4 MP)

43 have section references errors (26 CW, 17 MP) six of the MP guide spec errors were blanks for section numbers that show up as error.

Unresolved references errors. Nine have references in text but not in the references paragraph (3 CW, 6 MP). Ten have references in the references paragraph but not in the text (2 CW, 8 MP). Some errors may show up in both categories because of extra spaces, etc.

Jim said that in some cases, the changes have been made, but the Notice hasn't been approved, and in some cases they are waiting for other updates. Scott noted that having brackets on entire subpart would also show up as an error.

14. Updating References. Jim Quinn reported on the process for updating references in the guide specifications. Notices are used for updating. One reference may be in several

different guide specs, so it may take a while to update all of the guide specs. There are currently 2,966 references from 198 organizations in the guide specs. There is no uniformity in way publications are designated; in some cases, an identifier has to be assigned. It takes years to develop standards, and may take months to get the updated standards and change guide specs. The Standard Master Reference List (SMRL) lists all references in guide specifications in one location. An attempt is made to keep it up to date. The SMRL is used to change references in guide specs. When a guide spec references a standard, designers and field personnel need to have the reference also. One solution - shortcut time between identifying changed reference and getting it into guide specs. SPECSINTACT has a mechanism to make changes throughout the database, which NASA uses. Anil Nisargand noted that different dates may occur in different sections, and mentioned that some agencies don't use dates, but use terms such "as currently available". Jim Quinn stated that the FAR requires citing specific reference dates. The Government is liable for designing to standards in effect at time of design. John Kerkowski asked if there is any benefit to be gained by making constant changes to keep all specs up to date at all times. Freddie Rush said that the design is based on the standard that is cited in spec; therefore construction must be to that standard, even if a later standard exists which is not referenced. Jim said that the goal is to review guide specifications each year, so at most, a guide specification is one year out of date. Also, due to time between design and construction, a standard may be out of date by time it is built.

Steve Freitas reported that a problem has also come up with different standards within the same job. It is the designer's responsibility to verify standards within job. Ray Duncan said that this shouldn't be a problem since construction should be to the referenced standard, however, field people and contractors don't like it this concept. Anil Nisargand suggested that designers normally just edit the guide specification and don't verify any references. He asked if the technical person for each spec keep up with changes in standards for their specification? John Kerkowski said that, if a designer is aware of change in a standard, he should alert the appropriate technical people to make the change to the specification. Rick Dahnke stated that his boss is adamantly opposed to global change to update all references.

Jim Quinn stated that IHS is coordinating with the standards agencies to assign designations for unnumbered references. In the past, the designations were assigned by Corps. IHS is

coordinating changes in designations to be as simple as possible. The SMRL is now a Tri-agency document, however, Navy and NASA document references are still being added.

Steve Freitas asked how the SMRL is being used in relation to survey for virtual library. Jim Quinn said that he doesn't think any service will provide us all 2966 documents referenced in guide specs. Steve Freitas said that the survey should provide good feedback for what standards districts really use. He noted that there are some design standards that are not referenced in the guide specifications; therefore, they aren't in SMRL.

Freddie Rush said that the consensus is to not recommend any change in procedures at this time. He suggested that, if date of a reference is dropped, date of design is implied, however, the FAR requires, and CSI recommends using, a date. The committee recommends that global changes should not be made to guide specifications without reviewing individual specifications.

15. Combining Notice Programs. Rick Dahnke said that all specifications work is now under Civil Works. Since Huntsville has responsibility for 85% of the guide specs, he recommends consolidating the Notice Program under Huntsville. Jim Quinn provided the following information:

There should be 242 Military Program and 19 Civil Works notices issued between July 1999 and June 2000. This is less than normal due to the reduced budget.

The average cost is \$800 per notice.

Huntsville could apply uniform procedures to the whole Notice process with a single program. It would be more efficient and provide more notices for less unit cost.

Funding should be 85% Military Programs and 15 % Civil Works based on the number of documents.

Jim Quinn recommended that the program should be consolidated prior to 30 September so the new program would be in place for the new fiscal year. He said that there could be some economies on the Civil Works side since Civil Works technical representatives are not in Huntsville, and are not funded through the Notice Program. Military Program technical representatives are located in Huntsville and are funded by

the Notice Program. The technical representatives are established by the specification proponents, and should stay the same. A consolidated program would give an opportunity to review procedures and the level of coordination. Charlie Baldi said that it isn't known how much money would be needed for technical representatives. Rick Dahnke asked if a budget could be established now, since the information will be needed to defend a decision to consolidate the Notice Program. Jim Quinn said that the level of effort and funding must also be decided. He said that last year it was determined that the program could be reduced. He also stated that we can get whatever can be produced from the funds available.

Rick Dahnke will prepare a request for proposal for the combined Notice Program. Rick said to handle the Civil Works part the same as Military Programs. Scott Stewart will get a cost for Civil Works technical representatives. Larry Seals suggested that division reorganization and district efforts to get technical 13's could provide a source for technical representatives. It could be a win-win program for divisions and districts. It could also be used where vacancies exist. John Kerkowski suggest that, based on needs identified, a data call could be sent out for technical representatives. Freddie Rush said the we need to identify what guide specifications need technical representatives, then go to divisions and districts to get qualification nominations submitted through proponents. Jim Quinn said Military Program specification don't have any guide specifications which need proponents. Scott Stewart will identify requirements for the Civil Works specifications.

Freddie Rush asked if we need to update the proponents for guide specifications due to the reorganization at Headquarters. Charlie Baldi stated that we need to do it. Jim Quinn will update current list to include all Military Programs and Civil Works proponents; Rick and Charlie will then update the list to reflect the new organization. Rick said that the architectural specifications that he was proponent for will go to an architect, and Charlie Baldi's specification proponents will also change. Anil Nisargand questioned the need for tech proponents. Rick Dahnke said that someone is needed to champion for updates, etc. Freddie Rush said that we also need to keep them because their involvement keeps visibility at Headquarters.

Jim Quinn said he would like to have the Notice approval process revised to permit issuing the notices along with a notification to the technical representatives and technical proponents. He said that currently, some notices don't get

published because they are out of date by time of approval. He also said that 90% of the notices issued are due to reference publication changes that are outside control of the technical representative or technical proponent. The approval takes process takes too long, and the nonapproval rate is 1 or 2%. Rick Dahnke said it should be able to get technical reviewers approval for architectural and possibly electrical specifications, but probably not for mechanical specifications. Freddie Rush suggested issuing notices and sending them to the technical representatives and technical proponents, since we could make changes if needed. Rick Dahnke said he would rather have the technical representatives approve the changes and notify the technical proponent by copy to provide any policy review comments. Jim Quinn suggested that the technical proponent would have ultimate responsibility for approval, which could be implied unless they specifically disapprove it.

Scott Stewart said that it makes sense to combine it since the functions have been combined at Headquarters, but there is a concern about loss of funding. He suggested that Vicksburg District could work for Huntsville to do some updates. Jim Quinn said that Huntsville could provide some money for notice review. Of the 57 Civil Works guide specifications, 8 specs have technical representatives from other districts and there are 18 different technical representatives within Vicksburg District. Scott said that Vicksburg District management had not seen Jim Quinn's paper, so he could not say what the District position would be.

Charlie Baldi summarized that there seems to be an agreement to combine the Notice Programs, but we need to work out the process. Rick Dahnke asked that a proposed budget be developed. Jim Quinn said that in the past the funding level was given to him.

Rick said there might also be a need for budgeting to combine specs.

16. NIBS Proposal. Ray Duncan said that the National Institute of Building Sciences (NIBS) was chartered in 1974 to act as an interface between industry and Government. NIBS could provide some tasks and keep in Government in technical control of specifications. The benefits include: responsiveness, quality in tagging and formatting, reduced costs of personnel. The idea would be to do some things currently done at Huntsville, Vicksburg and the Navy, such as checking the SMRL with guide specifications and make recommendations on changes, which would be sent forward to the technical representatives. After approval, the guide

specifications would be placed on the Internet and CCB. It would be necessary to define exactly what the CSSSC would want done, then put together a cost estimate. The technical representatives would remain in the Government since this is inherently a Government responsibility. NIBS could make recommendations on changes to the technical representatives. NIBS would format guide specifications, etc. Rick Dahnke asked what this would cost. Ray said it would first be necessary to identify what we want done. Jim Quinn said that the SMRL is currently contracted out under the SI contract, and that we could possibly will contract out the submittal revisions. John Kerkowski asked if it would be all or none for the program or for individual specs. Jim Quinn said that the whole program would affect 3 or 4 people, including 1 FTE at Vicksburg District. Steve Gooden said that he questions the premise that contracting is cheaper; why would a Government agency give work to quasi-government agency? Ray Duncan said that the work would be done by lower pay employees. Jim Quinn said that there would still be a management function to perform. NIBS being nonprofit has advantages over other contract.

Charlie Baldi said that it is easier to get funds for contracting out than for Corps office due to commitment. Charlie said that we should look at the possibility. Rick Dahnke suggested that we could look at merging Corps and Navy specifications. There is a legal question on whether we can sole source to NIBS; it may have to be competed. Earl Kenneth from NIBS says that sole sourcing has been done. The Navy has had some sole source studies. Jim Quinn reminded the committee that the SMRL is currently contracted to IHS. Under that contract, a comparison program compares Navy, NASA and Corps guide specifications to see what to add or delete. IHS maintains reference dates and titles.

Freddie Rush suggested that the committee would need to see a cost for proposal. Charlie Baldi said scope would have to be prepared for a proposal. Jim Quinn will identify clerical and administrative requirements and provide them to Rick Dahnke. John Kerkowski suggested that we should resolve the sole source issue prior to proceeding with proposal. NIBS should also identify the sole source issues.

17. Joint ER on Plans and Specifications. Freddie Rush had sent out a draft scope of work for combining the Engineering Regulations on plans and specification. There was overwhelming consensus from the CSSC members to have a combined ER for specs and plans. Some comments were received, however, none were major. Some comments suggested to

including Support For Others, design documents and design analysis (complete package), and HTRW. Freddie said that expanding the scope would require bringing in other expertise. The design aspect would require Headquarters approval. Charlie Baldi said that he was not comfortable paying for other aspects suggested. He has money to start for the plans and specifications aspects. Steve Gooden stated that the plans and specifications aspect was big enough for its own regulation. John Kerkowski asked if we could address both programs, or basic a document for philosophy, then put implementation in appendices. That way, an HTRW appendix could be added later. The appendices could then change independently of basic document. Rick Dahnke said that all regulations are under the jurisdiction of one branch chief now. Anil Nisargand said that he favors the philosophy, with specific implementation. Dave Barber said that one document says design analysis is part of plans and specifications, and another says that design documentation is part of plans and specifications; therefore, both should be included in the ER.

Freddie Rush questioned if this is this now outside our charge, since we are a specification committee. Don Carmen asked if the new regulation would eliminate specifications ER. Freddie said that it would. The plans ER exists, but it hasn't been updated. The new ER would only be putting the specifications and plans ER's together. Adding design policy would greatly expand scope and number of people involved. Freddie suggested that we could offer to do the plans and specifications regulation, and bring add policy if approved. Charlie Baldi said he would prefer to stay with only plans and specifications in order to get the regulation done. Dave Barber said that since ER 1110-345-700 includes HTRW, it would have to be addressed also. Freddie Rush said that Appendix D was already taken out of ER 1110-345-700; the new regulation would be taking out Appendix C. With only two sections left, it would have to be revised. It would then be possible to do a separate ER on design analysis for both Civil Works and Military Programs since they are both under the same office. Steve Gooden said that this is outside CSSC area. Charlie Baldi or Rick Dahnke will talk to Harry Singh about it. If the concept is satisfactory, we could do it with a separate appendix for Design Analysis, Design Documentation Report, Plans and Specifications. Steve Freitas said that most of the plans ER has been replaced by Tri-Service guidance. Charlie Baldi suggested that Vicksburg District could take the lead and assemble a team. Rick Dahnke said that, if we can get a draft, we could get reviewers. Freddie Rush suggested that a scope could be put together for approval. Rick Dahnke said that since we are end users for all documents, it is a logical

extension of the CSSC charter.

18. SPECSINTACT Users Group. A SPECSINTACT users group was recommended at the Specifications Workshop. The CSSC will move ahead on it. The users group will consist of about 10 members, preferably power users, and will have meetings about 2 times per year. Indyne (the SPECSINTACT contractor) will be invited to the meetings. One member should be selected per division to act as champion for the division. Steve Freitas will work on setting up the group, probably in next month or so. Steve Freitas said that the group would probably have a web page connected to CSSC page. He said it would probably start in October 2000. Steve will send Charlie Baldi and Freddie Rush an estimate for operation of the users group. Charlie Baldi said that travel will be paid for but probably not labor, unless sufficient funds are available. Steve Freitas said that he also wants to establish a chat room. The first meeting will be to get group together, other meetings will only be to discuss matters that come up. Larry Seals suggested putting together a paper explaining purpose, etc., prior to soliciting members. He suggested that the best candidates would be those who do end processing of specs.

19. Combining Guide Specs. The Environmental Guide Specification is being done. Charlie Baldi reported that Headquarters has agreed to combining guide specifications, and that the work will be done when the guide specifications are updated. No funds are currently available. Rick Dahnke will determine when the guide specifications are to be updated.

20. Status of Recommendations.

a. Recommendation No. 15 - combining guide specs - Headquarters has agreed to do this when the specifications are updated

b. Recommendation No. 14 - updating guide specifications at same time as related criteria is update - this will be implemented under Criteria and Guidance Update Program - Rick is now in charge of both.

c. Recommendation No. 13 - Industry Standards - this was already discussed.

d. Recommendation No. 12 - CSI/SAME competition - Ray Duncan has not heard anything on it lately

e. Recommendation No. 11 - workshop - this will be discussed

later.

21. Funding Status. The committee currently has about \$100,000. Pittsburgh District will need about \$15,000 this fiscal year for the Concrete Rehabilitation guide spec and \$60,000 next year. Charlie Baldi will check with M.K. Lee on updating the roller compacted concrete guide specification. The rest of the funds will be carried over, about \$50,000. Mike Dahlquist suggested combining some guide specs ahead of schedule. Freddie Rush said there might also be some guide specifications to be updated.

Johnny Baggette said that there are some commercial specifications that are generic, and that we might want to look at some to see what the differences are with Corps guide specifications. Charlie Baldi said that GEN Gennega had previously been told that we would use commercial guide specifications for Civil Works when possible. We have already eliminated several Civil Works guide specifications. Ray Duncan stressed that we can't just use commercial specifications; they have to be put in SPECSINTACT format, have submittals set up, etc. Anil Nisargand suggested get commercial specifications for technical proponents to review with CEGS, and edit the CEGS as needed to be comparable. Freddie Rush said that this could be a significant effort. Johnny Baggette suggested that we probably have a lot of information in our specifications that is covered by code and doesn't need to be there. Ray Duncan agreed that AE's have told him that there is information in our guide specifications that is not needed. We tend to repeat a lot of standard information, FARs, etc. in our guide specifications which shouldn't be done. John Kerkowski suggested the committee could query districts to see if there is a customer with small project that could be done with commercial specifications for comparison purposes; then analyze the results. This would help us see how feasible it would be to use commercial specs.

Larry Seals said that ARCOM would like us to use commercial specs. Johnny Baggette said that commercial specifications have been used for Design-Build. Larry Seals said that for our processes and Quality Control, we need a SPECSINTACT version of the commercial specifications. It was suggested that commercial specifications could be used to improve our specs on section-by-section basis. Don Carmen suggested that the Corps should keep their minds open for other systems for specs in case a better mousetrap comes along. Ray Duncan said that packages in future might not look anything like what we have at the present. They will be database type systems linking specs, drawings, takeoffs, etc.

Steve Freitas said that Sacramento District has given the successful contractor source codes for specs (SPECSINTACT) and drawings (Microstation of Autocad). The contractor then gives back as-builts electronically. They haven't had any feedback yet on how the process works.

Ray Duncan suggested insuring that AE's are familiar with SPECSINTACT, not just require its use. Sacramento District requires a test submittal prior to final submittal. Steve Freitas said that the Air Force demands that contract specifications be furnished in Word. There is no problem with converting the specifications, but the Corps loses control of them.

Anil Nisargand asked if CSSC would want to buy a set of commercial specifications to look at, with limited access, i.e. CSSC committee members, mainly to keep informed, but not for general use. Jim Quinn suggested that we could simplify the guide specifications by cutting the number of submittals, detailed installation procedures, unnecessary requirements in Part 1, lessons learned requirements, and things that are added for Construction Division.

Freddie Rush noted that the ER permits districts the flexibility to include other requirements (i.e. commercial specifications); CEGS are not required. There are two issues to be considered: Military Programs that wants Design-Build and use of commercial specs, Civil Works that will probably require Requests for Proposals or Design-Bid-Build and CEGS. The CSSC got SPECSINTACT widely accepted; we need to be careful what message we send to the districts. Steve Freitas expressed a concern that giving contractors free choice of what to use will have a real mess in dealing with what is furnished to us. Particularly with EBS, there is a need to have close control of deliverables.

Johnny Baggette suggested that getting something (commercial specifications) to review would allow us to answer questions when they come up. Then the information could be used when updating guide specifications. Jim Quinn said that the problem with this is that the commercial specifications would have to be reviewed by those writing the guide specifications to have valid comparison. It was noted that the Navy South Division has issued solicitations without specifications, using only criteria and submittal requirements.

Anil made a motion to purchase (up to \$5000) for commercial spec for use of technical representatives to review and compare. The motion was not seconded, but let to considerable

discussion. Johnny Baggette suggested that we might be able to get the firm to give us copies for review. Jim Quinn noted that we might have to pay the technical representatives for review time. Freddie Rush questioned if there would be restrictions on use of the commercial specifications. Jim Quinn cautioned that this might reopen the push to use commercial specs. Anil said that, if we don't get an answer at the CSI convention, it would be six months, until the next CSSC meeting to use it.

Anil's motion was to try to get a copy of a commercial specification (Arcom or Masterspec) for use by select people for review purposes, not for actual use. Freddie Rush suggested that we need someone to investigate it. Don Carmen suggested two steps would be involved: 1) familiarization with the commercial specification by CSSC members (some or all specifications), then 2) review of the specifications by technical representatives for evaluation. Freddie suggested that we could possibly get some copies of some specifications, then provide limited access to the database. Jim Quinn cautioned against opening can of worms on use of commercial specifications. Freddie agreed that we don't want to give the perception that we have less support for SPECSINTACT.

Johnny Baggette said that customers say "if commercial specifications work for Design-Build, why not use them for other jobs". Freddie replied that we have to get competition so only CEGS works; for Design-Build projects, the competition is achieved through the selection process.

Steve Freitas recommended requiring Technical Representatives and Technical Proponents to review commercial guide spec pertaining to their specifications when updating them. Johnny Baggette agreed that this would not result in a problem of sending the wrong message about SPECSINTACT, and would still get some aspects of commercial specs into our guide specs. Jim Quinn reminded the committee that revisions to guide specifications and new guide specifications are coordinated with industry representatives.

Ray Duncan said that there were two issues involved: content of specifications, and answering questions about the use of commercial specifications. Jim Quinn's former report would probably help with providing answers. Jim will send a copy of the report to Freddie. Ray mentioned that we also have to consider copyright requirements when using commercial specs. We can use ideas from the specifications, but not the actual text.

Freddie Rush encouraged committee members to become familiar with some commercial specifications. Larry Seals suggested instructing those updating or writing new guide specifications to look at commercial specs for content also.

22. Design Build. At the workshop, Albuquerque District said at that they had some Design-Build specifications available.

Rick Dahnke said that Headquarters is not planning to set up and maintain a set of Design-Build guide specifications. They are preparing a criteria specification for Federal requirements to be used in Design-Build solicitations. The draft should be available by September or October. The criteria document will be reviewed by CSSC and will become instructions for Design-Build procurement. Rick said it could be structured for use with Design-Bid-Build. It will include FAR, DOD and policy requirements. There are currently some Design-Build front-end sections on Techinfo (linked to other site). These will be maintained by Headquarters.

Carl Kersten reported that the Navy has not set any specific guidance on how to do Design-Build contracting, but it does have set percentages for Design-Build. At present, each Division is doing it their own way. They plan to try to get together and come up with policy. He noted that CCB has a guide specification from Newport that is 7-8 years old, which was put on as guide. It is obsolete and is being removed.

Ray Duncan questioned if anyone is tracking long-term costs of design build.

Don Carmen noted that the Albuquerque District Design-Build template is in SPECSINTACT format. The link on Techinfo is to Joel Hoffman's work at Huntsville. There are currently about six documents in SPECSINTACT format. Phil Royer, Albuquerque District, and Joel Hoffman, Huntsville, are instructors for DB.

Steve Gooden made a motion recommending that Design-Build be a standing subcommittee of CSSC to investigate issues on Design-Build and report back to CSSC for discussion and recommendations. The motion was not seconded. Larry Seals said he thought Ray Navidi was forming a Design-Build committee, and a CSSC subcommittee would duplicate it. Steve Gooden said that he is on the Design-Build committee; his suggested subcommittee would be only for specifications related issues. He suggested three or so people. The question of funding would need to be addressed by CSSC. Johnny Baggette questioned the need for a standing committee since other committees are working on it. Steve Freitas

suggested inviting others to attend CSSC meetings to address such issues. Jim Quinn noted that Design-Build is also in Rick Dahnke's area. Mike Dahlquist suggested that, since we have CSSC members on the Design-Build committee, they could report back to CSSC on issues. Freddie Rush suggested that we could ask for a fact sheet for discussion at next meeting. Steve Gooden withdrew his motions and said that he will keep up on the issue.

23. New Issues. Dave Barber expressed appreciation to Don Carmen and Mike Dahlquist for serving on committee.

Steve Freitas proposed issuing guidance on using WordSpec to convert SPECSINTACT to Word for customers who want it. The recommendation would be to use SPECSINTACT to do processing and convert to WordSpec at end. Larry Seals suggested adding hot tips to web page. Jim Whitehead gave Charlie a paper on process that was put in Engineering and Construction News a couple of months ago. The article may be put on the web site. Charlie noted that the Engineering and Construction News issues are also on website. Steve Freitas will check on it.

Steve Freitas asked if a customer gives a standard specification to be used in their project, and, if we sanitize it to comply with our policy, is there a problem with using it? Should we develop a standard for each customer, based on commands, to meet their needs? Freddie Rush asked if we normally check with Office Counsel and Contracting involved in these issues. Steve Freitas said that he doesn't think Office of Counsel gets involved, and that the projects are normally handled by Project Management. Freddie Rush suggested that we might need to let our customers know that the product must meet our legal requirements. This could be a selling point for selling product to customers (Air Force) Anil Nisargand noted that the Air Force is decentralized, each base has own criteria and way of doing things. We don't have funds or time to convert other specifications, etc. to our way. Don Carmen said that individual installation requirements should be an installation issue. Freddie Rush suggested that we could put out information on who is doing work for Air Force installations to permit exchanging information and experience.

Steve Gooden noted that meeting with CSI seems to work well. He made a motion to recommend having a standing meeting with CSI convention each year, probably before convention because there are a lot of benefits. Jim Quinn seconded the motion. The motion passed unanimously. Ray Duncan said it is good idea to have more federal involvement with CSI and asked if we could schedule a little tighter to avoid dead time in

afternoon.

24. Status of Guide Specs.

a. Soil and Rock Anchors - Tom Andre reported that the draft guide specification has been sent for Corps of Engineers and industry review. Comments will be incorporated and the specification will be submitted for approval later this year. The guide specification will have tailoring options for soil or rock, as well as prescriptive or performance type specification.

b. Fracture Critical Members - Joe Padula of WES was waiting for EM appendix to be finished. Draft of appendix is out now. The appendix is written as if there is no guide specification. Apparently those preparing it were not informed that the guide specifications were continuing. The references in the appendix (CWGS, ER) also need to be updated. Freddie Rush will try to get structural technical representative at Vicksburg District to review the appendix. He will then determine which guide specifications need to be updated. Larry Seals suggested getting with Joe Hartman to remind him of the current requirement to coordinate criteria updates with guide specifications.

c. Concrete Rehabilitation - Tom Andre reported that Pittsburgh District is prepared to begin work on the guide specification when funding is received. A request for sample specifications and lessons learned will be sent out this summer.

d. Drainage Structures - Scott Stewart reported that the Omaha District specification was converted to SPECSINTACT format by Vicksburg District. It has a problem with references to Federal and Military Specifications and Standards. Vicksburg is trying to find substitute industry standards.

e. Mechanically Stabilized Walls - Mike Dahlquist reported that the guide specifications are done, and they are working on the Engineering Circular. The final draft has been completed and sent out for review with comments due 21 June. Funds have been expended.

f. Gabion study - John Kerkowski report good news, Gigi Gazelle had a baby, but hasn't finished draft report. He said there would not be an interim report. The report will include gabion study information, and will be sent out to review prior to next meeting. He said that, depending on extent of

comments, next meeting would have the final or prefinal report. John said nothing terribly dramatic is occurring in terms of performance. The study will provide guidance on which type to use. Both types are already in the guide specification. The report will also include recommended changes to the guide specification. The report will be available and may be referenced in the guide specification. Larry Seals suggested putting a cover on the report and making it an engineering document such as an ETL. The interim report is on the CSSC website.

g. Cathodic Protection - Scott Stewart reported that the specification has been converted to SPECSINTACT format and has been updated. It is either at Headquarters for approval or is ready to go to Huntsville for issue.

h. Metallizing - The specification has been converted and is at Headquarters. Charlie Baldi will check on its status.

i. Automatic Controls for locks from CERL - The specification is being converted to SPECSINTACT format.

j. Systems Furniture - The guide specification is being updated.

k. Dredging - Positive responses have been received from the districts for a dredging guide specification. This is now an Operations call. The information received will be passed on to Operations for their decision. Don Carmen said that he has had volunteers to write it Jacksonville and Wilmington Districts. Charlie Baldi asked Don to furnish a time and cost estimate. CSSC is willing to do prepare the guide specification; Operations will review it. Freddie noted that there might have some money available this year. The guide specification will cover coastal and river dredging. Anil Nisargand noted that some projects also have contamination. John Kerkowski urged caution on addressing HTRW issue within the dredging guide specification.

l. Articulated Concrete Block Revetment - There has been some positive response to the query. St. Paul District prepared a proposal to write spec for \$14,000. Mike Dahlquist said that the specification would be based on ASTM information that may not be published for a couple of years. Doug Crum will be asked to refine the proposal schedule. The proposal will be discussed at the next meeting.

m. Roller Compacted Concrete - A lot of positive responses have been received on updating it. Steve Freitas will get a

cost and schedule estimate for doing it.

n. Concrete Specifications 03301, 03700,03701 - M.K. Lee is in control of these. The specifications have tables from CSI that have to be updated constantly. The use of tolerance tables is a complicated issue. It was suggested that a task group be formed to study the issue at a cost of about \$15,000. Freddie Rush will get with M.K. Lee. Mike Dahlquist suggested that we may have an unsolvable issue and we may not want to put more money into it. John Kerkowski recommended that we should get a better handle on the problem to see if anything should be done.

o. Composite Piles - A call was received from Lancaster piling about piles with concrete core and plastic coating. This is not a proprietary product, but a corrosion resistant covering. Joe Hartman liked idea, but didn't want to prepare any EM guidance. Freddie Rush said that he thinks we should have guidance before preparing guide specifications. There may be some guidance prepared if there is any interest in districts. Freddie Rush will do a query of the Districts. Larry Seals suggested that it could be a tailoring option to existing specifications. The query should only ask if the product is being used in districts, not if they want a guide specification.

p. Resident Management System - the RMS guide specification is on Techinfo.

24. National Institute of Building Sciences (NIBS).

Earl Kenneth from NIBS gave a presentation on services that NIBS can provide. WBDG.org is a whole building design guide developed by a contractor for Navy LantDIV. It has environmental and sustainability information in it. The idea is for the guide to be knowledge based. It also has documents and links to relevant information.

Don Carmen asked how soon and how much it would cost to get reference publications on CCB. A proposal has been submitted to IHS for standards that are in guide specifications and design guidance. NIBS will have Government publications and free reference publications. IHS will provide reference documents for which there is a charge. There will be four or five plans for various types of work plus access to individual documents. The process of providing this system won't be easy. The system will be web-based and use HTML and PDF file formats.

Earl reported that there are no plans at present to drop CD's and use only DVD's due to limited use of DVD's. The goal is to eventually only use the web-based system. The problem with going web-based now is the download time for graphics. NAVFAC and GSA are supporting the NIBS effort. The system can also be used for Executive Orders. Air Force is also supporting the effort and Corps of Engineers Military Programs has been working with them.

Freddie Rush questioned sole source contracting with NIBS. Earl replied that FEMA funds NIBS for sole source documents for earth quakes and the courts, Department of Education, etc. have sole source contracts with NIBS. NIBS has letters from OMB saying sole source is OK, since it is in Congressional legislation.

Thomas E. Andre, P.E.
Secretary, CSSC

1 Encl

CORPS SPECIFICATIONS STEERING COMMITTEE
Meeting Attendance
Atlanta, Georgia
20 and 21 June 2000

<u>Name</u>	<u>Organization</u>	<u>Phone</u>
Charlie Baldi	CECW-E	(202) 761-4239
Jim Quinn	CEHNC-ED-ES-G	(205) 895-1821
Larry Seals	CELRD-ET-EW	(513) 684-3034
Freddie S. Rush	CEMVD-ET-ET	(601) 634-5936
Mike Dahlquist	CEMVP-PE-D	(651) 290-5571
Thomas Andre	CELRP-ED-DT	(412) 395-7306
Tats Hirata	CEPOD-ET-T	(808) 438-6950
Dave Barber	CESWD-E TEC-T	(214) 767-2385
John Kerkowski	CENAD-ET-E	(718) 481-8737
Scott Stewart	CEMVK-ED-D	(601) 631-5567
Don Carmen	CESAW-TS-EE	(910) 251-4656
Johnny Baggette/ Steve Gooden	CESAD-ET-EA	(601) 562-5115
Steve Freitas	CESPK-ED-M	(916) 557-7296
Anil Nisargand	CENWS-EC-DB-SP	(206) 764-3828
Rick Dahnke	CECW-ET	(202) 761-4125
Carl Kersten	NAVFAC	
Ray Duncan	Spec Consultants	